

# Work Order ID 45562

June 26, 2009 11:38:23 AM



Page 1

Item ID: D350-689-041 GY

Accept



Setup Start



Revision ID: A

Item Name: Dual High Back Seat Ass'y

Stop



Start Date: 15/07/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
----------	--------------

IIN D350-689	Rev A
--------------	-------

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Assemble as per IIN 350-689-041



110

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control



120

0.00



Grey Sandtex(Ref:4.3.5.6) per QS1005 4.3

Powdercoat

Memo

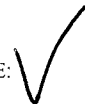
0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:



22.11.09

Date: Thursday, 05/02/2009 3:47:05 PM  
 User: Julie Dawson

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: DUAL HIGH BACK SEAT
Job Number	: 45562		
Estimate Number	: 12271		
P.O. Number	:	Part Number	: D350689041
This Issue	: 05/02/2009 S.O. No. :	Drawing Number	: IIN-D350-689 PG9
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LARGE FAB ASSY	Drawing Revision	: A
Previous Run	: 43557	Material	:
Written By	:	Due Date	: 25/03/2009 Qty: 1 Um: Each
Checked & Approved By	: <u>JUL 09 02 06</u>		
Comment	: Est Rev:H Removed Sub-Parts 06-02-09 JLM Est Rev:I As per NCR 070 06-09-06 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D30231	Back Panel
-----	--------	------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3023-1 Back Panel

044565
EL 9-6-22

2.0	D3017041	Back Frame Assembly
-----	----------	---------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3017-041 Back Assembly

044559
EL 9-6-22

3.0	MS20600AD4W2	Rivet
-----	--------------	-------



Comment: Qty.: 40.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick:

Qty Part Number Description Batch

40 ms20600ad4w2 Rivet

M109059
EL 09/06/24

4.0	MS20600AD4W3	Cherry Rivets
-----	--------------	---------------



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Cherry Rivets

Batch: M106375
EL 09/06/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 05/02/2009 3:47:05 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL HIGH BACK SEAT

Job Number: 45562

Part Number: D350689041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Assemble as per IIN 350-689-041

*Ep 09/06/24* ① ~~09-06-23~~

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*09/06/24* (X)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: *12:51 pm*

OVEN TEMPERATURE: *320°F*

FINISH TIME: *1:20 pm*

*HI 09-06-30* (X)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*BR 09-06-30* P.

9.0

D30241

Spacer



Comment: Qty.: 3.0000 Each(s)/Unit Total: 3.0000 Each(s)

Pick:

Qty Part Number Description Batch

3 D3024-1 Spacer *B43394*

*Ep 09/06/30*

10.0

D30281

Stud



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 D3028-1 Stud *342446*

*Ep 09/06/30*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 05/02/2009 3:47:05 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL HIGH BACK SEAT

Job Number: 45562

Part Number: D350689041

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D30291

Spring



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3029-1 Spring B42447

*Ep 09/06/30*

12.0

D30301

Lock



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3030-1 Lock B42517

*Ep 09/06/30*

13.0

D30311

Loop



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3031-1 Loop B27949 (17)

B43395 (17)

*Ep 09/06/30*

14.0

AN312A

Bolt



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

Pick:

Qty Part Number Description Batch

3 AN3-12A Bolt M109297

*Ep 09/06/30*

15.0

AN960JD10L

Washer



Comment: Qty.: 23.0000 Each(s)/Unit Total : 23.0000 Each(s)

Pick:

Qty Part Number Description Batch

23 AN960JD10L Washer M109632

*Ep 09/06/30*

16.0

MS21042L3

Nut



Comment: Qty.: 23.0000 Each(s)/Unit Total : 23.0000 Each(s)

Pick:

Qty Part Number Description Batch

23 MS21042L3 Nut (or -3) M111274

*Ep 09/06/30*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 05/02/2009 3:47:05 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL HIGH BACK SEAT

Job Number: 45562

Part Number: D350689041

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

MS24693S272

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 MS24693-S272 Screw

M111295

*EP 09/06/30*

18.0

MS27039117

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 MS27039-1-17 Screw

M11540

*EP 09/06/30*

19.0

MS27039119

Screw



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 MS27039-1-19 Screw

M10089

*EP 09/06/30*

20.0

D30221

Seat Pan



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D3022-1

Batch

Seat Pan

B44562

*EL 9-6-23*

21.0

D3021041

Tube Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D3021-041

Tube Assembly

Batch

B44561

*EL 9-6-23*

22.0

D3016041

Seat Frame Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D3016-041

Frame Assembly

Batch

B44556

*EL 9-6-23*



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 05/02/2009 3:47:05 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL HIGH BACK SEAT

Job Number: 45562

Part Number: D350689041

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

24.0

QC5

Assemble as per Dwg IIN-D350-689

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

26.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. DSI 9349	REV. A SHEET 1 OF 1
DATE 06.08.16		TITLE RIVET CHANGE	SCALE NTS
A	06.08.16	NEW ISSUE	

## **DART SERVICE INSTRUCTION**

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 Rev.A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 Rev.0  
REF. CANADIAN STC: SH02-33  
REF. FAA STC: SR01620NY

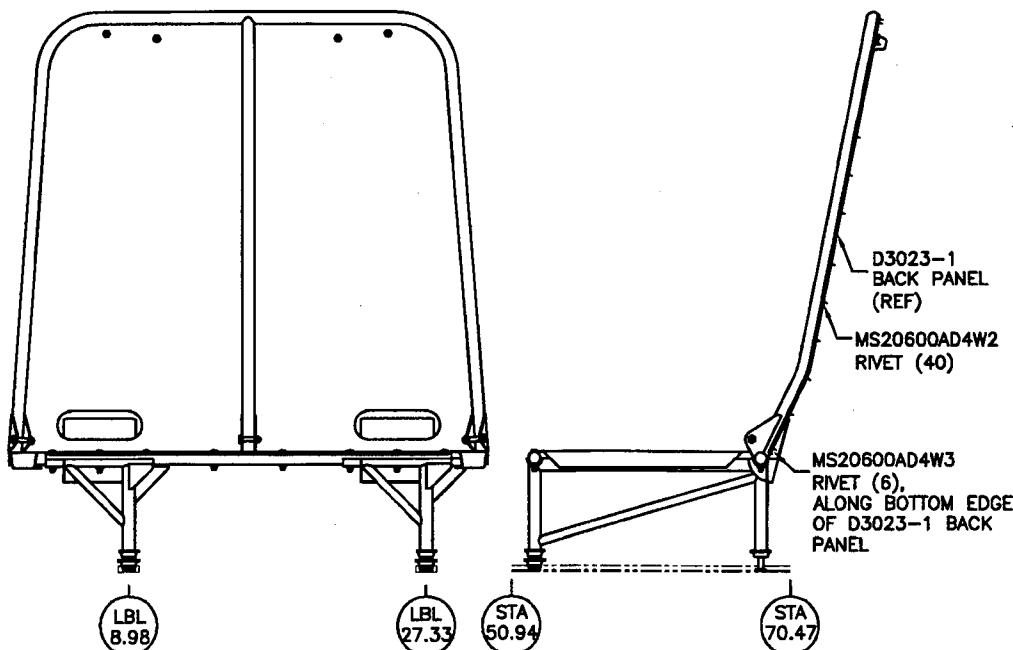
Some rivet lengths have changed, as indicated below, to ensure proper assembly of the D350-689-041 Dual High Back Seat Assembly. If installing replacement parts, it is acceptable to use longer rivets in other locations as required to ensure proper fastening. The parts list is revised as follows:

WAS:

QTY -041	Part Number	Description
X	D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
46	MS20600AD4W2	RIVET

NOW:

QTY -041	Part Number	Description
X	D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
40	MS20600AD4W2	RIVET
6	MS20600AD4W3	RIVET



SHOP COPY  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *45562*

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 06.08.16  
CERT. NO.: SH02-33  
ISSUE NO.: 1

**D350-689-041 Dual High Back Seat Assembly**

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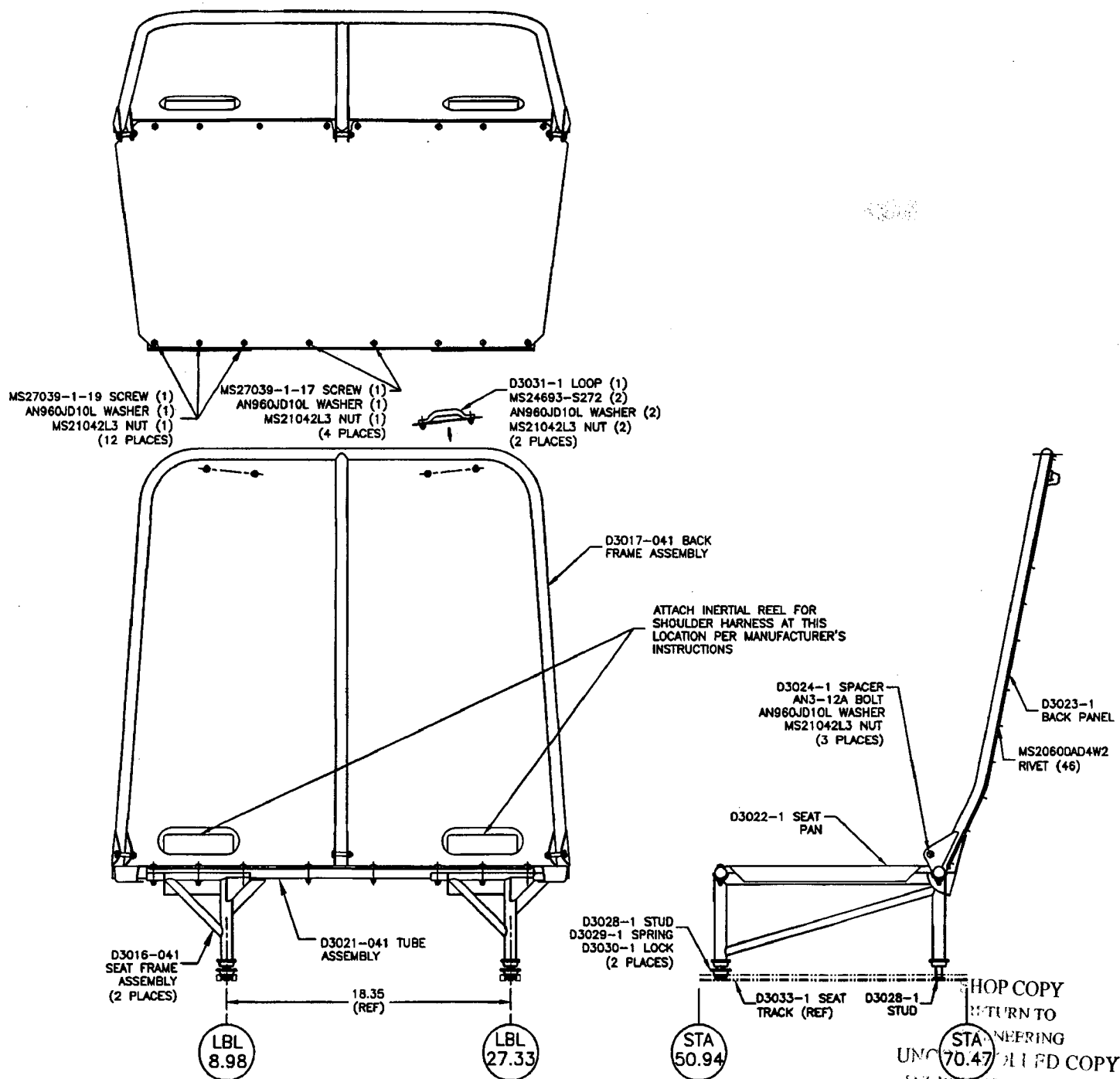


FIGURE 6: Installation of D350-689-041 Dual High Back Seat Assembly

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Revision: A

Date: 01.05.30

#### 4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-011	27.0 lb	-18.2 in	-491 in-lb	60.7 in	1639 in-lb
Dual High Back Seat Installation	12.2 kg	-0.46 m	-5.6 m-kg	1.54 m	18.8 m-kg
D350-689-013	2.0 lb	-18.2 in	-36 in-lb	60.7 in	121 in-lb
Floor Provisions Kit	0.9 kg	-0.46 m	-0.4 m-kg	1.54 m	1.4 m-kg

#### 5. PARTS LIST

Qty		Part Number	Description
X		D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X	D350-689-013	FLOOR PROVISIONS KIT
1		X D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
	2	D3016-041	SEAT FRAME ASSEMBLY
	1	D3017-041	BACK FRAME ASSEMBLY
1		D3018-1	SEAT CUSHION
1		D3019-1	BACK CUSHION
	1	D3021-041	TUBE ASSEMBLY
	1	D3022-1	SEAT PAN
	1	D3023-1	BACK PANEL
	3	D3024-1	SPACER
	1	D3025-1	BEAM
	1	D3026-1	CHANNEL
	1	D3027-1	CLIP
	1	D3027-3	CLIP
	1	D3027-5	CLIP
	4	D3027-7	CLIP
	4	D3028-1	STUD
	2	D3029-1	SPRING
	2	D3030-1	LOCK
	2	D3031-1	LOOP
	1	D3032-1	SPACER
	1	D3033-1	SEAT TRACK
	1	D3033-3	SEAT TRACK
	6	23 AN960JD10L	WASHER
		3 AN3-12A	BOLT
	16	MS20426AD3-6	RIVET
	17	MS20426AD4-6	RIVET
	18	MS20470AD4-5	RIVET
	2	MS20470AD4-6	RIVET
	30	MS20470AD5-6	RIVET
		46 MS20600AD4W2	RIVET
	8	MS21059L3	NUTPLATE
	6	MS27039-1-10	SCREW
		4 MS27039-1-17	SCREW
		12 MS27039-1-19	SCREW
		4 MS24693-S272	SCREW
	2	MS24693-S273	SCREW
		23 MS21042L3	NUT (OR MS21042-3)

SHOP COPY

REL TO

F 100 3

UNTO COPY

S 02

45502

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Revision: A

Date: 01.05.30